

Name: _____

Date: _____

**Grade 5
Mathematics Probe
Form A**

1. What symbol should replace in the number sentence below?

$$30 \quad 3 + 6 = 16$$

- A. +
- B. -
- C. \times
- D. \div

2. By how much would 217 be increased if the digit 1 were replaced by a digit 5?

- A. 4
- B. 40
- C. 44
- D. 400

3. Max bought 50 plants for his garden. He plans to put 8 plants in each row. How many complete rows of 8 can he plant?

_____ complete rows

4. What value of n makes the number sentence true?

$$6 \times 11 \times 7 = n \times 6 \times 11$$

$n =$ _____

5. The difference between 85 and 53 is 32. Meredith added some number to 85 and then added the same number to 53. What would be the difference between the two new numbers?

- A. More than 32
- B. Less than 32
- C. 32
- D. It depends on the number added to 85 and 53.

6. Christy has 88 photographs to put in her album. If 9 photographs will fit on each page, how many pages will she need?

_____ pages

7. A package of birdseed costs \$2.58 for 2 pounds. A package of sunflower seeds costs \$3.72 for 3 pounds. What is the difference in cost per pound?

- A. \$0.05
- B. \$1.14
- C. \$1.24
- D. \$1.29

8. If $1 \frac{1}{3}$ cups of flour are needed for a batch of cookies, how many cups of flour will be needed for 3 batches?

_____ cups

9. What fraction of a pint is 5 fluid ounces? (1 pint = 16 fluid ounces)

- A. $\frac{5}{1}$
- B. $\frac{1}{5}$
- C. $\frac{16}{5}$
- D. $\frac{5}{16}$

10. Which is equivalent to $\frac{35}{50}$?

- A. $\frac{3}{4}$
- B. $\frac{7}{10}$
- C. $\frac{7}{25}$
- D. $1 \frac{15}{40}$

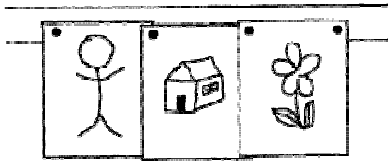
11. Students in Mrs. Johnson's class were asked to tell why $\frac{4}{5}$ is greater than $\frac{2}{3}$.

Whose reason is best?

- A. Kelly said, "Because 4 is greater than two."
- B. Keri said, "Because 5 is larger than 3."
- C. Kim said, "Because $\frac{4}{5}$ is closer to 1 than $\frac{2}{3}$."
- D. Kevin said, "Because $4 + 5$ is more than $2 + 3$."

12. Marlene made 6 batches of muffins. There were 24 muffins in each batch. Which of the following number sentences could be used to find the number of muffins she made?

- A. $6 \times 24 = \square$
- B. $6 \times \square = 24$
- C. $6 + 24 = \square$
- D. $6 + \square = 24$



13. Children's pictures are to be hung in a line as shown in the figure above. Pictures that are hung next to each other share a tack. How many tacks are needed to hang 28 pictures in this way?

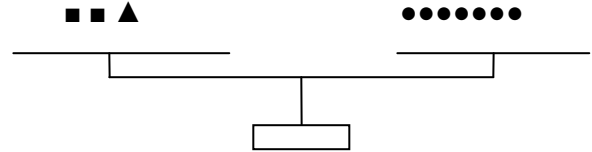
_____ tacks

14. In Jean's class there are twice as many boys as girls. If there are 10 girls in the class, how many **boys and girls** are there in the class?
_____ total

15. Sheila counted 800 seeds on day 1. Each day after, she counted half as many seeds as she did the day before. How many seeds will she count on day 5?

_____ seeds

16.

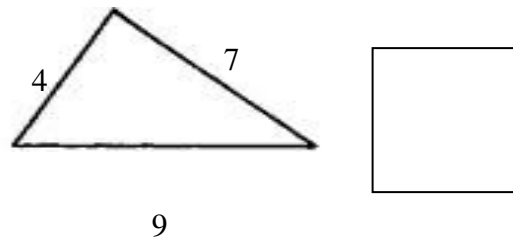


The objects on the scale above make it balance exactly. If \blacktriangle above balances $\bullet\bullet\bullet$, then what does one \blacksquare equal? Draw your answer.

_____ = 1 \blacksquare

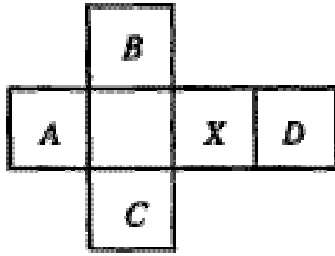
17. Circle the letter that has two parallel lines?

A T K N



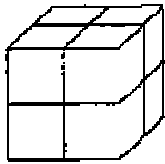
18. If both the square and the triangle above have the same perimeter, what is the length of each side of the square?

Each side is _____.



19. The squares in the figure above represent the faces of a cube which has been cut along some edges and flattened. When the original cube was resting on face X, which face was on top?

face _____



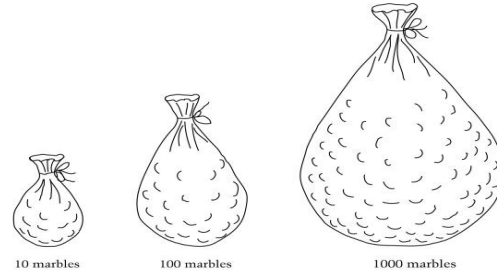
20. In this figure, how many small cubes were put together to form the large cube?

_____ small cubes

21. Stella wants to buy 2 notebooks that cost \$2.79 each, including tax. If she has one-dollar bills and no coins, how many one-dollar bills does she need?

_____ dollar bills

22. Ted went to the beach at 10:30 a.m. and came home at 2:00 p.m. How long was he gone?



23. There is only one red marble in each of the bags shown above. Without looking, you are to pick a marble out of one of the bags. Which bag would give you the greatest chance of picking the red marble?

The bag with _____ marbles.

24. There are 3 fifth graders and 2 sixth graders on the swim team. Everyone's name is put in a hat and the captain is chosen by picking one name. What are the chances that the captain will be a fifth grader?

- A. 1 out of 5
- B. 1 out of 3
- C. 3 out of 5
- D. 2 out of 3

25. Based on the map below, about how many miles is the shortest route from Oakdale to Fenton?

_____ miles

